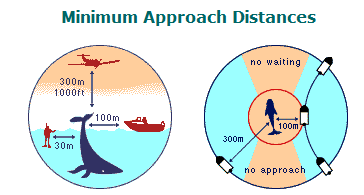
**Student Activity Sheet 1**

**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class\_\_\_\_\_\_\_\_\_\_\_**

Spend a few minutes thinking about a whale. When you thought of its size, what did you take into consideration - length, weight, or maybe something completely different? Sizes can be compared in a number of different ways, but one thing in common is that all the comparisons rely on mathematics. This investigation about whales will show you how measurements such as length and weight can be used to make size comparisons.



**Length**

1. Southern Right, Humpback and Killer (or Orca) are the names of three common types of whales. Now think about an object that you are more familiar with, let's say a truck. Do you think those whales are longer or shorter than a truck? Explain.

 a. b. c.

Which whale is which in these pictures?

a\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ c.\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Go to one of the web sites below, or another site if you find one, and find out how long each type of whale is when it is fully grown. Then fill in the table with each measurement.

**Killer Whales:**

[**http://kids.nationalgeographic.com/kids/animals/creaturefeature/orca/**](http://kids.nationalgeographic.com/kids/animals/creaturefeature/orca/)

**Southern Right Whale**

[**http://www.abc.net.au/oceans/whale/spot.htm**](http://www.abc.net.au/oceans/whale/spot.htm)

**Humpback Whales**

[**http://www.whale-images.com/info/humpback-whale-facts.htm**](http://www.whale-images.com/info/humpback-whale-facts.htm)

**Whale Lengths**

|  |  |  |
| --- | --- | --- |
| **Whales** | **Centimeters** | **Metres** |
| **Humpback Whale** |  |  |
| **Southern Right Whale** |  |  |
| **Killer Whale** |  |  |

3. Visit some web sites to find out the lengths of two different types of truck. Then list the lengths in the table below.

**Truck Lengths**

|  |  |  |  |
| --- | --- | --- | --- |
| **Truck** | **Type of**  **truck** | **Centimeters** | **Metres** |
| **1** |  |  |  |
| **2** |  |  |  |

4. How many trucks would you need to line up bumper to bumper to match the length of a killer whale?

5. How many times longer is a killer whale than a humpback whale?

6. In a group of 5, measure the length of each other's arm span in cm. Calculate the group's average arm span length.

How many students with their arms extended end to end would it take to

equal the length of one southern right whale?

**Arm Span Measurements (cm)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **1.** | **2.** | **3.** | **4.** | **5.** |
| **Arm Span** |  |  |  |  |  |

Group's average arm span:

Number of students to equal one southern right whale:

7. Using a piece of string or rope, mark off the length of each type of whale. Experiment to find out how many times you can connect the string or rope across the classroom.

